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THE FRESHET. P. 101



# MARY GAY; OR, WORK FOR GIRLS.

By JACOB ABBOTT.

IN FOUR VOLUMES.

ILLUSTRATED BY H. W. HERRICK.

WORK FOR SUMMER.



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# THE MARY GAY SERIES.

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  - II. WORK FOR SPRING.
  - III. WORK FOR SUMMER.
  - IV. WORK FOR AUTUMN.
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# MARY GAY'S WORK IN SUMMER.



## CHAPTER I.

### LEARNING WITHOUT A TEACHER.

ONE pleasant summer morning Mary and her sister Luly, who had been gathering flowers in their little gardens, in order to make some bouquets to put into their mother's vases, sat down in a summer-house to arrange the flowers, and were busily engaged in this work, when they heard the garden-gate open and shut, and looking up, they saw their uncle Edward coming in. Their Uncle Edward, as they called him, was a very young man, and he looked more like their cousin than like their uncle; but the relation which he really bore to them was more like that of an uncle than a cousin, though he was not exactly their uncle after all.

Still he was very kind to the children,

and they liked him very much, and they were always glad when they saw him coming.

There was a little table in the summer-house, upon which Mary had laid her flowers, and was now sitting by it, arranging them. Luly was sitting upon the step of the door, playing with a lily which she was pulling to pieces. As Edward came near, she held up what remained of the lily to show him what she called the little men standing round in a circle, bobbing their heads and bowing.

"Yes," said Edward; "those are what we call the stamens.

"You are arranging your flowers, I see, Mary," added Edward.

"Yes," said Mary. "I am making bouquets for mother's vases."

"That is a very nice thing to do," said Edward, taking a seat at the same time. "Girls are always very fond of gathering and arranging flowers, and I often wonder why they don't take more interest in studying botany, so as to understand something scientifically about the flowers they gather and arrange."

"Why, you see, it is so hard to study botany," said Mary, "on account of the hard names."

"That is just it," said Edward. "I should think that it would be precisely *because* it is hard that you would take an interest in doing it. There is a great pleasure in undertaking and accomplishing what is difficult. Boys are always delighted in trying to perform some difficult feat, such as climbing over high fences, going up tall ladders, and jumping over wide chasms."

"Oh, of course," said Mary, "such things are only play to them."

"But it is the difficulty of them that makes them good play," said Edward. "If those things were perfectly easy to do, the boys would not care anything about them. The *difficulty* is the attraction, and I don't see why difficulty in a study should not be an attraction to you. The series of hard names is a sort of long ladder, which I should think you would like to learn to go up, just because it is hard."

"I don't see why they have so many hard names in botany," said Mary. "I think it is very silly."

"Things often appear very silly to people that don't know anything about the reasons for them," replied Edward.

"Well, what is the reason," asked Mary, "for all those hard names? Why can't they as well call the flowers by their common names?"

"There really *are* very excellent reasons for it," said Edward, "and if ever you take a notion to study botany, and go far enough to show me you are in earnest about it, I will explain them to you. In the mean time I think the most sensible thing for a young lady in your state of intellectual advancement to do, is, to conclude, when she finds any system or usage agreed upon and adopted by the wisest men of all nations, that there *must be* some good reason for it, and not pronounce it silly till she knows what the reason is."

"And besides," said Mary, "I have not anybody to teach me."

"That is very true," said Edward. "Botany is hard, and you have not anybody to teach you. They are two very good reasons. A person who does not wish to learn a thing, and is in search of excuses



for not doing it, could not possibly find two better excuses than those. A boy who did not wish to learn to swim might say the same things — namely, that it is very hard to learn to swim, and that he has not anybody to teach him; and they would be excellent excuses. But a boy who *does* wish to learn pays no attention to such difficulties, but pushes forward and learns. He finds it hard of course, and perhaps he improves at first very slowly; but if he perseveres, he finds after a while that he can swim as well as any of the boys.”

Edward went on farther to explain that when he said that a girl could learn botany without a teacher, he did not mean that she could do it absolutely without instruction; but only that it was not necessary that she should have a regular professor, to give her formal lessons, and hear her recite. She must of course have somebody to tell her what to do, and to answer questions from time to time, and to explain things difficult to understand that she might find in the book.

“Even boys in learning to swim,” said he, “always ask the other boys how they

do it. Sometimes the boy whom he asks is good-natured, and stops to explain the motions to him, and sometimes he is not good-natured, and won't help him at all. But if the little fellow is determined to learn, he does not get discouraged by the refusals that he receives, but perseveres, and in the end finds out all he wants to know.

"I knew a boy once," continued Edward, "that learned arithmetic without any teacher. His father and mother were dead, and he was put apprentice to a shoemaker, after he had only been long enough to school to learn to read and write a little. He did not even know the figures, and he had not even a slate-pencil."

"Then," said Luly, "I don't see how he could do anything at all. I am sure I could not learn to cipher without any slate and pencil."

"This boy had no slate," continued Edward, "and so he took a smooth board about as large as a slate, and a piece of chalk for a pencil. He kept his board and his chalk under his bench, in the shoemaker's shop, where he worked, learning to make shoes."

“But if he did not know how to make the figures,” said Mary, “I don’t see how he could begin.”

“He began by watching the customers that came in when he was there alone, for it was a small shop in the country, and his master was away a great deal of the time. He watched the customers to find some one whom he could ask to set him a copy of figures upon his board. First a lady came in to have a pair of shoes mended for her little boy. He did not *dare* to ask her. Next a gentleman came, who seemed to be in a hurry, and so he thought it would not do to ask *him*. After that a large boy came, one whom Ebenezer knew had been to school a good deal.”

“Was his name Ebenezer?” asked Luly.

“Yes,” said Edward. “I ought to have told you his name before. He thought the boy was just the person for him to apply to. So he pulled out the board and a bit of chalk from under the bench, and asked the boy to make him a row of figures along the upper edge of it, as many as there was room for. And the boy did.”

"How many figures was there room for?" asked Luly.

"As far as five," said Edward. "Ebenezer thought that that was enough to begin with.

"That evening he spent half an hour making the five figures by the light of the kitchen-fire, when he went home. The girl in the kitchen asked him what he was doing. He said he was learning to make figures. He asked her if she knew arithmetic. She said she did not know much about it. Then he asked her if she knew how to add. 'Yes,' says she; 'you put the figures under each other, and then add them together, and write down how much they come to underneath.'

"So Ebenezer wrote down a 3 and a 4 under it, and added them together; but he could not put the 7 down underneath, for he did not yet know how to make a seven."

Edward would probably have proceeded somewhat farther in explaining how Ebenezer went on with his work of learning arithmetic without any regular instruction, but just at this moment Sophronia, the

girl who lived at Mrs. Gay's, came to the garden-gate and called to him, saying the lady was ready.

She meant a lady whom Edward had brought with him in a chaise, to call upon Mrs. Gay to make a visit.

Accordingly, Edward, in obedience to the summons, brought his narrative to an abrupt termination, and went away.

## CHAPTER II.

## A SURPRISE.

ONE pleasant day in July the children at dinner proposed, as there was no school that afternoon, to go into the woods in the pasture, to see if they could not find some wild-flowers to combine with those which they had gathered from their gardens, in making up the bouquets to place in the vases. But their mother said she would prefer that they should not go away from the house that afternoon, and they must make up the bouquets as well as they could from garden-flowers alone.

Luly asked her mother why they could not go into the pasture. It was a very pleasant day, and not too warm.

Now when children ask *why* they can't do this or that which their mother forbids them to do, it is a sort of trap which they set, and unfortunately most mothers are apt to fall into it. You ask why, in such

cases, not because you really wish to know what the reason is, — for the sake of the information, — but because you wish to get an opportunity to argue the case with your mother, and try to convince her that her reasons are not satisfactory. So that giving the reason almost always leads to a debate, which usually ends in making matters worse than they were before.

I advise you, therefore, if you ever grow up and have children under your care, as their teacher, or otherwise, not to give them the reason at the time when you refuse them anything, but make them content themselves with knowing that so you decide. If they really wish to know the reason, for information, then you can, if you please, explain it to them afterward. But if you give them the reason at the time, it will only lead to a debate between you and them, and they will probably be more dissatisfied at the end of it than if you had not given them any reason at all. In fact, when a mother says to her child, “You must not do this or that, *because*,” — the *because* serves only as an invitation to the child to make difficulties and objections.

This relates however only to commands. When you are giving the children advice, with the intention of allowing them to follow it or not as they please, *then* it is very proper to give them a reason, and leave them to judge of it and decide. But when you *decide*, giving a reason only weakens the force of your decision, and invites the child to call it in question and dispute it.

Of course this rule, like all other rules of this kind, is by no means universal. There are many cases in which it is very proper to give the reason on the spot, especially where there is some new information to be given which the child did not possess before, as for instance where some children wished to go out and sit in the summer-house in the garden with their work, and their mother said they must not go, for the gardener had found a hornet's nest in the trellis, and was going to destroy it that evening when the hornets were all in ; and that consequently they must not go there till the next day, for fear of getting stung.

Here was a reason which gave the children new information, of a kind too which



would be pretty sure to convince them, and not lead to any debate.

On the other hand, if the reason was that it was somewhat cold and damp that afternoon, and one of the children had already taken cold, then it would be better not to give the reason; for if it were given they would be pretty sure to reply, that it was not damp and cold at all, but very warm and dry.

But to return to the story. Besides Mrs. Gay's general custom of not explaining to her children why she did not allow them to do this or that, she had in this case a reason for not allowing Mary and Luly to go away from the house, which she specially wished to keep secret. What this reason was will soon appear.

The children acquiesced at once in their mother's decision, though for a moment Luly looked somewhat disappointed. They did not remonstrate, however, for they knew by past experience that an answer once given by their mother to any request they made was pretty sure to stand.

"Never mind, Luly," said Mary. "We can make some pretty bouquets from our

gardens,—we have got so many flowers in our gardens now.”

So they put on their sun-bonnets after dinner, and went out to their gardens.

They gathered a large number of flowers, cutting the stems off neatly with a pair of shears which they kept expressly for that purpose, and were proceeding toward the summer-house to arrange them, when suddenly they heard a voice calling to them from the garden-gate, and looking up, they saw a little girl, apparently a year or two older than Luly, coming through.

“It is Lucy Jane, I declare!” said Mary.

Lucy Jane left the gate open, and came dancing and skipping along down the garden-walk, calling out at the same time, “I’m going to stay a fortnight! I’m going to stay a fortnight!” Luly was just able, by standing on tiptoe, to look over the hedge of pea-vines which bordered her garden on that side, so as to see her as she came dancing along.

The truth was that Mrs. Gay had sent to Lucy Jane’s mother, who lived in the city, to invite Lucy Jane to come and spend a fortnight at her house. She expected

her to arrive that afternoon, and wished Mary and Luly to be at home to receive her.

The particular reason which led her to wish not to tell the children why she was unwilling that they should go into the pasture that day, was because she desired to keep the coming of Lucy Jane a secret, in order to give Luly and Mary a pleasant little surprise.

I am not myself much in favor of these pleasant little surprises, as they are called, as I think that the anticipation of a coming pleasure is a very important part of the enjoyment which the pleasure affords. Besides, there is something in the suddenness and momentary bewilderment which accompanies the occurrence of any very unexpected event, that greatly diminishes for the moment the pleasurable sensations which might otherwise be produced by it.

However this may be, Mrs. Gay contrived this for a surprise, and thus it happened that Mary and Luly knew nothing about the expected visit of Lucy Jane until they saw her coming dancing in through the garden-gate.

## CHAPTER III.

## LUCY JANE.

LUCY JANE was a very lively girl, full of animation and vivacity, and very little accustomed to obey any superior authority. Her mother in fact had not trained her to the habit of obeying authority and law, but had "managed" her by manœuvres and artifices of various kinds. She was older than Luly, and though not much larger was stronger and more active; and as she was venturesome and impetuous she was continually getting into mischief. When she was quite a little child, Bridget, the servant-girl, who had been blacking the stove, was called out of the room a moment, and Lucy Jane took it into her head to go on with the work, and as the stove was nearly finished she went to blacking the table and the chairs.

Her mother punished her pretty severely for this; but she ought not to have been

punished at all for it, since she had no reason to suppose that she was doing anything wrong. She was only trying to do what she saw other people do. Very likely she thought she was really helping Bridget in her work.

Mrs. Gay allowed Lucy Jane to do as she pleased during the afternoon of the day on which she arrived, but the next morning at breakfast she put both her and Luly under Mary's special charge.

"I give Mary the care of you," said she. "If you wish for anything go and ask her for it. If she can give it to you, and thinks it is right to do so, she will. If there is any doubt about it she will come to me. *You* must not come to me to ask for anything, but go to her, and if it is necessary *she* will come to me.

"If you wish to go anywhere or to do anything that you are not sure about, you must ask her. And if she directs you to do anything, or not to do anything that you were going to do, you must consider her words as a command, and obey it, just as you would if it had been a command from your mother.

"If she commands you wrong," continued Mrs. Gay, "you must obey her just the same, and then, after you have obeyed her, come to me and tell me about it. Perhaps she will refuse to give you something which you think you might as well have as not, or will not let you go somewhere where you want to go, or allow you to do something that you wish to do. If you think she is wrong, you must still obey her, and then come and tell me. I will see about it.

"Now, Luly and Lucy Jane," continued Mrs. Gay, "you two may go out to play, and I will give Mary *her* instructions."

"Can we stay to hear her instructions too?" asked Luly.

"No," said her mother. "I am going to give Mary her instructions privately. You will not know anything about them; only if you think she commands you wrong, then you are to come in and let me know. But then you must first do what she says. You are going to play that she is the queen, and you are her people."

While Mrs. Gay had been giving her general directions to the children, in respect

to their obligation to obey Mary in everything, Lucy Jane and Luly seemed to look rather grave and assumed a somewhat dissatisfied expression of countenance, which did not augur very favorably in respect to their disposition to submit cheerfully to the authority thus placed over them. But when Mrs. Gay put it upon the ground of *playing queen*, the aspect of the affair seemed to be suddenly changed, and the countenances of the children brightened up at once, and assumed an entirely different expression.

Lucy Jane and Luly then went out, and after they had gone Mrs. Gay explained to Mary what her duty was as guardian of the children.

“You must give them as few commands,” said she, “and interfere as little with their amusements and enjoyments, as you possibly can.

“When they wish for anything, do not refuse it to them from caprice, or because it would make you some trouble to get it for them, but let them have it, unless there is some really good and sufficient reason why they should not have it. And do not

interfere with them more than you can help, or forbid their doing this or that, for the mere pleasure of exercising power over them and making them obey you ; but let them have all the liberty you can, and do not interfere with their pleasures except for some really good reason. If either of them in any case refuses to obey you, when you do give them any command, have no contest with them, but leave them to disobey, and come at once and let me know."

After receiving these instructions, Mary went out to find the children, and at once commenced her task of watching over and taking care of them. She instinctively followed, in her mode of management, the course which her mother had been accustomed to pursue with herself and with Luly, and succeeded in the main very well. An older child, when placed in charge of a younger one, almost always falls into the mode and style of discipline which she has been accustomed to witness in her mother's management of her family, so that you may generally know, when you see a girl having the care of a little child, and observe her mode of managing it, what kind



of system of domestic discipline she has herself grown up under at home.

One day, not long since, I was taking a walk in the great Central Park at New York, when I observed, at a short distance before me, a girl about seven years of age, with a little boy of three or four who was accompanying her. The boy had fallen a few steps behind, not being able easily to keep up with his sister, and being desirous moreover of rambling about a little at his own discretion. In doing this he went a few steps upon the grass which formed the margin of the path. Just at this moment the girl turned round and began to call to him in a sharp voice, and speaking moreover in a succession of short, quick sentences, which followed each other like a series of explosions.

“There, now, Tommy! You’re a-stepping on the grass! You naughty little thing! Oh, if I could only get my hands on you! You’ll get tookened up! The p’licemen are coming, and you’ll get tookened up and put into a dark hole full of bears all night! Come right along to me this minute.”

Tommy paid very little attention to this scolding, but toddled along at his leisure, only asking, though he could scarcely yet speak plain, whether the grass belonged to the "peace men."

"Yes," said the girl, sharply. "Come right to me, if you don't want to get a whipping."

"Did the peace men put the grass here?" asked Tommy, walking along at the same time quite at his ease, as if he knew perfectly well that his sister's vituperation and threats were words, and nothing more.

It is very easy now to see what kind of domestic government the mother of these children exercised over them at home. It was a government of angry scoldings, empty threats, and absurd and shameless falsehoods.

I am afraid that Lucy Jane was not under a much better government than this at home, for one morning, a few days after she came to make her visit, she was out in the barn with the other children, where they had gone with a basket to bring in the eggs which they might find in the hens'

necks, and seeing a ladder leaning against the hay-mow, she began to climb up the rounds of it. Mary, who was in another part of the barn at the time, but not so far away but that she could see her, called to her to say that she must not climb up the ladder. Lucy Jane paid no attention at all to what Mary said, but went on stepping up from one round to another, higher and higher.

“Lucy Jane,” said Luly, “you must obey my sister Mary.”

Lucy Jane made no answer, but went on.

On seeing this, Mary came to the place, and taking hold of her under her arms, lifted her off the ladder, and set her down gently upon the barn-floor.

Lucy Jane was quite indignant at being treated in this way. She shook and jerked her elbows against Mary, to get free, and at first began to scream and cry; but in a moment, suddenly stopping, she made a rush at the ladder, as if determined to climb up upon it again.

Mary quietly turned round and stood with her back against the ladder, so that

Lucy Jane could not climb up. Lucy Jane then, after making one or two ineffectual attempts to get to the ladder, went away in a very sullen humor, and sat down upon the sill of the door.

"Lucy Jane," said Luly, speaking in a very serious manner, "you ought to obey my sister Mary. That is what my mother said."

"No," said Lucy Jane, sulkily.

"Yes," rejoined Luly. "My mother said so."

"She said," rejoined Lucy Jane, "that I must obey her just as I should my own mother, and if my mother should tell me to stop going up a ladder, I should not mind it a bit."

"Oh, Lucy Jane," said Luly, "what a girl you are!"

"Besides," said Lucy Jane, "she had no business to tell me not to go up the ladder. I was only going up a very little way, and it would not have done any harm."

"But mother said that if what she told you was wrong, you must do as she said first, and then go and tell mother about it."

“Yes,” said Lucy Jane, “and that is what I mean to do now. I will go right in and tell her this very minute.”

So Lucy Jane rose from her seat, and began to walk off resolutely toward the house. She soon however began to slacken her pace, and presently she stopped, and stooping down began to examine a little ant-hill which she saw in the walk. Pretty soon she called to Luly to come and see the ant-hill.

Luly immediately ran off toward the place.

“Let me come and see it too,” said Mary. And when she reached the place she expressed great curiosity and interest at watching the movements of the ants.

“What a cunning little ant-hill,” said she. “How did you happen to find it, Lucy Jane?”

“Oh, I saw it as I was coming along,” said Lucy Jane.

Mary then went on to talk about the ants and the ant-hill, saying she wished that she could look down to the bottom of the hole, so as to see what sort of rooms and chambers the ants had down there.

She did this in order to turn Lucy Jane's thoughts into a new channel. And she succeeded perfectly well in this attempt. Lucy Jane soon forgot her grievance about the ladder, and gave up the idea of going in to make a complaint to Mrs. Gay against Mary.

Mary often resorted to the device of suddenly turning Luly's and Lucy Jane's thoughts into some new channel when they were out of humor, or angry with each other, or were involved in difficulty of any kind. For instance, at one time, when she was arranging her flowers in the summer-house, she heard sounds as if the two children were in some sort of altercation, and looking up she saw that they had got a little hoe between them, both having hold of the handle, and each trying to pull it away from the other.

"I tell you it is my hoe," said Luly, "and you must give it to me."

"No," said Lucy Jane, "I got it first."

Just at this moment Mary caught sight of a butterfly, alighting upon some flowers near the summer-house. She immediately called out aloud to Lucy Jane and Luly.

“Children!” said she, — “children! run here quick, and help me catch this butterfly.”

Down went the hoe in an instant, and both the children came running as fast as they could make their way over the ground, to see and help catch the butterfly. Mary led them on a long chase after the butterfly, over half the alleys of the garden, until at length the gay and thoughtless thing, wholly unconscious perhaps that anybody was trying to catch him, after fluttering about among the beds and flowers, flying this way and that, just as he pleased, went up over the garden-fence and disappeared from view.

The children had by this time entirely forgotten their quarrel, and both felt good-natured again; and so Mary, going back with them to their garden, succeeded without the least difficulty in providing them both with tools, and setting them at work together in the most amicable manner.

Such a course as this is the best possible mode of disposing of half the petty disagreements and quarrels of little children, by older brothers or sisters who have charge

of them. Instead of gravely inquiring into the merits of the question, in order to find out who is in the wrong, and so settle the disputes in a regular and formal manner, the best way is to turn the thoughts of the children away from the whole subject at once and suddenly, and make them forget it, by means of some novelty or surprise. It is true that to manage in this way requires some tact and dexterity, and people who have no tact or dexterity cannot do it.



## CHAPTER IV.

## PLANS.

MARY and Luly had a way of making what they called panoramas, by coloring — or painting, as they called it — printed pictures, selecting those that were of the same breadth, and then gumming them together end to end, so as to make a long strip, which they would afterwards roll up. There were short pieces of marble-paper, or paper of some kind, pasted at the ends, to form a kind of cover, when the panorama was rolled up to be put away.

Mary and Luly had a plan of mounting these panoramas on rollers in a box in some way, so that by turning a crank the series of pictures might be successively brought to view, like those of a real panorama, and they had once or twice consulted John on the feasibility of this idea. John had the scheme under consideration,

but nothing effectual had yet been done toward carrying it into execution.

Several of the rolls had been finished, however, and Lucy Jane, when she came to see them, was so much interested in them, that she was very desirous of making one for herself. She could paint, she said, very well indeed.

But unfortunately Mary's stock of pictures suitable for this purpose was exhausted. To make a panorama of this kind it requires a number of pictures all of the same breadth, so as to make, when gummed together end to end, a long strip, which may be rolled up into a roll, — or, speaking more elegantly, into a *rouleau*. Mary had still a number of pictures left in her stock, but all those which would form series of equal breadth had been taken out already, and those that were left would not go together very well.

Thus all that Mary could say in answer to Lucy Jane's wish, was, that she would see if she could find some pictures that were suitable, and that if she could, Lucy should make a panorama.

When she made this promise she had

no definite idea where she was to look for more pictures, but she came unexpectedly, a few days afterward, upon the means of fulfilling her promise in a very ample manner. She stopped one day, when she went into the street of the village, on an errand, to buy a magazine at a book and stationery store, where also the daily and weekly newspapers were kept, and the monthly magazines. While looking at the things in this store, Mary saw upon a shelf, out of the way in one corner, a considerable pile of the back numbers of pictorial papers of different kinds. These were numbers that had been left over from previous sales, and were now laid aside.

Mary asked the shopkeeper if they were for sale. He said yes, and he would sell them cheap. She might have them, he said, for thirty cents a dozen. Mary looked at them a little, and found that they contained a great number of pictures that were exactly suitable for panoramas, being rather long and narrow, and there being a great many of the same width.

So she went home and informed her mother of the discovery that she had made.

"If I had some of those papers," said she, "I could help Lucy Jane make a very pretty panorama. I could make one for Dickey too, and for Sarah. They both want one."

Dickey and Sarah were two of the neighbors' children.

"Or, what would be better than that," said Mary, "I could have a little painting-school, and teach them to paint panoramas themselves. They could come Wednesday and Saturday afternoons."

"Have you got paint-boxes enough, and brushes, for so many scholars?" asked her mother.

"I did not think of that," said Mary. "I have only one paint-box, and there will be four scholars,—Lucy Jane and Luly, and Dickey and Sarah. I have brushes enough, but I suppose that each of the scholars would want a paint-box, and I have but one."

"Perhaps by systematizing the work a little," said Mrs. Gay, "you could make one box answer. I suppose you don't require a great many colors."

"We want green for the trees and the

grass," said Mary, "and blue for the sky, and red for the chimneys and for the brick houses, and yellow for some of the other houses. The villages look prettier, I think, if we make some of the houses red and some yellow."

"And you might paint some of them brown, I should think," said Mrs. Gay, "and that would make a still greater variety."

"That would be a good plan," said Mary. "And then, besides, we want brown for the stems of the trees, and for the roads, and for the roofs of the houses too."

"That makes five colors," said Mrs. Gay,— "red, yellow, green, blue, and brown. Now suppose you take five saucers, and rub a large quantity of one of those colors in each. Then give one saucer — the green for instance — and one brush to one of your scholars, and let her paint at once all the trees and grass over her whole picture, — everything in fact that is to be green, — such as dresses, window-blinds, and other such things. While she is doing that you give another one the red, and let her paint everything in her picture that is to be red.

"You do the same," continued Mrs. Gay, "with the other colors, and so set all your scholars at work at the same time, each with a different color. Then when any two of them have finished with one color, they exchange their saucers, brushes and all, and each goes to work with a new color, and so on until all the work is done."

Mary thought that this would be an excellent plan.

"It will be a great deal better than the other way," said she, "for it will save our washing out our brushes so often, which is a great deal of trouble, and gets the water in our tumblers colored so quick that we have to keep changing it all the time."

So Mrs. Gay gave Mary thirty cents, and she went immediately to the stationery store, and bought a dozen of the pictorial papers. They made a pretty large roll.

All this time Luey Jane and Luly were at play in the garden, and knew nothing about Mary's design. Her mother advised her to say nothing about it to them until she was ready to put it into execution. Accordingly Mary, when she came home

with her pictorial papers, went up into her room with them, and put them all away except three. She cut out the pictures from these three, and arranged them in sets, according to their breadth. She required five sets, one for each of her scholars, and one for herself. She found that she had nearly, but not quite, enough for her five sets, from these three papers, and so she took two more. By this means she obtained five sets complete — each containing pictures enough to make, when they should be pasted together, a strip from four to six feet long.

She put away the remaining papers, and also the separate pictures of odd breadths which were left after the sets had been taken out, and then carried the sets down to her mother.

Mrs. Gay looked at them all, and seemed much pleased with them, and then Mary asked her whether she thought she had better let the children choose the sets that they liked best, each one taking her choice in turn, beginning with the oldest, or with the youngest. But her mother said that would not be the best plan, for the one

whose turn came last, in such a mode of distribution, would be very apt to think that her pictures were not so pretty as the others. Even if she would have originally liked that one better than any, the fact that all the others had been chosen before it, would have destroyed its value in her mind.

"You had better decide yourself which set each one shall have," said Mrs. Gay. "Give Dickey the one that contains the greatest number of horses, guns, or soldiers, or other such things as are most likely to please a boy; and then divide the others among the girls according to their age, giving the oldest the one that will make the longest roll."

So Mary looked over the sets, decided upon the distribution of them, tied them up separately, and marked each one with the name of the person who was to have it.

Mary determined to have her school in what was called the play-room, which was a large unfinished room over the kitchen, where the children often went to play,—especially in wet weather.



At first she thought that she would use a great carpenter's bench which stood there, for a table; but on examining the bench she found that it would be too high. Besides, a carpenter's bench always has a broad board in front of it, which makes it very inconvenient to sit at in a chair, although it is not at all in the way of a carpenter, who works always standing.

Then Mary thought of carrying up a common table from some of the rooms of the house; but she reflected that it would be very hard to carry such a table up-stairs, and that even if she should succeed in getting it up, it would not be very convenient, for it would be too small for four scholars, and would also be too high for such little children to work at, sitting in common chairs.

So she finally concluded to borrow Sophronia's ironing-board, which was large enough for two to sit at upon one side, and two upon the other, and she thought that she could contrive to support it in some way, upon two chairs, by means of boxes, or something of that sort, at just the right height.

When all these arrangements had been made, Mary told Luly and Lucy Jane that she was going to have a painting-school for painting panoramas, to begin the next Wednesday afternoon, and to be finished on the following Saturday afternoon, and she sent them over to the house where Richard and Sarah lived, to invite them to come.

## CHAPTER V.

## THE PAINTING-SCHOOL.

MARY carried her plan, of a painting-school for the four children, into very successful operation. Sophronia was not only willing to lend her the ironing-board, but also carried it up into the play-room for her. There Mary contrived to convert it into a table, by supporting one end of it upon the work-bench, and resting the other upon a box which she placed in a chair, at a proper distance. The box which was placed in the chair was of such a size as to bring the end of the board which rested upon it to about the same height as the bench, and this made the table level.

She found, however, when it was thus placed, that the whole table was too high, — altogether too high for such children as she was to have for her scholars to sit at in common chairs. In the first place, any common table of itself would have been

too high, as common tables are made of the height to accommodate grown people, and not children. Then the bench was higher than a table, — as such benches always are, being made for the use of men standing at their work. Then, last of all, the upper surface of the ironing-board was higher than the bench, to the extent of the thickness of the board itself, inasmuch as it rested upon it. All these things combining made the ironing-board a great deal too high.

Mary however remedied the difficulty by putting boxes and cushions in the chairs after she had placed them at the tables. She had five chairs, four for her scholars, and one for herself. There was not room for her chair at the table, and so she placed it at the end of the bench, which was a more convenient place than any part of the front would be, for at the end it was open underneath, which made room for her feet.

“There,” said she, when she put the chair for herself in its place, — “that is the teacher’s seat.”

“Shall we come to the teacher’s seat

when we want you to show us how to paint our pictures?" asked Luly.

"Yes," replied Mary.

"And when we want more paint?" continued Luly.

"Yes," replied Mary.

"Ah!" said Luly, "that will be just what we shall like."

These arrangements were made the day before the class were to meet for the first time. When the children came they were delighted to see the preparations. They ran about the table, climbed up into all the chairs, knocked down some of the boxes in so doing; then made a rush all together to the teacher's seat, where Mary had her five saucers before her, each with a different color rubbed in it, and began clamorously to choose their favorite colors.

It was all, — "Give me the *blue*, Mary;" "I want the *green*, Mary;" "No, *I* must have the green; give *me* the green, Mary, it is my favorite color."

Then, before Mary had had time to answer these questions, they chanced to spy the rocking-boat and the swing, and they all ran off eagerly to them. Two climbed

into the rocking-boat, and the other two began to struggle for possession of the swing.

Mary's heart almost failed her at witnessing all this tumult. She began to think that a class of even four was more than she could manage.

"Never mind," she said to herself, after a moment's pause. "I will let them have a little time to play. They will get tired of playing pretty soon, and then they will come and want to paint."

After waiting a short time, till she thought the first gush of their eagerness for play might have passed, she said to them, —

"Play away, children, as long as you like; but as soon as any one of you get tired of play and are ready to begin to paint, come to me and I will set you at work."

Hearing this, Lucy Jane at once jumped out of the rocking-boat, saying, "I'm ready to come now."

Whereupon immediately all the rest scrambled down from the boat and from the swing and made a rush to the teacher's

desk, all clamorous to be set at work first.

“Which is the youngest?” asked Mary.

They all told their ages, and on comparing them it appeared that Dickey was the youngest.

“Then I shall give Dickey his work first,” said Mary.

So she gave Dickey a picture, and told him to find the trees in it, and the grass ground. All those were to be painted green, she said.

“And I will show you how to paint them,” said she. “The rest can look on quietly and see how I do it, and then they will know how to paint theirs green.”

So she took another picture for herself, and began to color the foliage of the trees green, —taking great care not to run over the outline, —and explaining to Dickey that he must be careful in respect to the paint.

“You *will* run over the line sometimes, of course,” said she, “but you must be careful, and do it as little as possible; and when you do run over you must be a little sorry, and take care not to do so again.

You need not be *very* sorry. Being a little sorry will do.

"And now," said she, "you may stay and see me show the others how to paint with the other colors, if you please."

"No," said Dickey. "I want to go and begin to paint myself."

"Very well," said Mary, "go."

So Dickey took his picture, and his saucer of green paint, and his brush, and went to his place at the table, and began.

Mary then inquired who was the next youngest among her scholars. She found that it was Luly. She told Luly that her first color would be red.

"You can paint some of the houses red," she said, "but not all. It will be better to paint some of them yellow, and some brown, for variety. All the chimneys must be red, and some of them are such little things that you will have to touch them very carefully, so as not to go over the line."

As she said this, Mary painted two or three of the chimneys on her own picture.

"The chimneys," she said, "will be the hardest of all that you will have to do."



After Mary had painted two or three of the chimneys, and also some of the houses, she said, —

“ You can paint some of the dresses red, if you please, — the gowns of the women and girls, and the trousers of the soldiers. You can paint some of the men’s jackets red too ; only if you paint their jackets red, you had better paint their trousers of some other color.”

Mary showed the children some other things which might be painted red, such as the smoke-pipes of the steamers, the flashes from the mouths of cannons, and streaks of sky in the west when the sun was going down.

After having explained all these things, she gave Luly her picture, her brush, and her saucer of red paint. But Luly did not go away. She preferred waiting to hear the instructions that Mary was going to give about the other colors.

Mary proceeded in much the same way in respect to the other colors, — yellow, blue, and brown. The brown was for the stems of trees, the roofs of houses, and the ground, where the ground was bare.

Of course Mary illustrated all these instructions by painting upon her own picture, which by this time began to look quite gay, though of course no part of it was finished, for Mary had only put on some of each of the colors here and there, to accompany her explanations.

When the instructions were completed, she gave each of the children their pictures and their materials, and sent them to their places at the table, to commence their work.

“And while you are painting your pictures,” said she, “I will stay here and finish mine, and if you wish to ask me anything, come here and ask me.”

So the children took their seats, and began their work, — all full of eager interest to get their pictures finished as soon as possible.

Now if Mary's object in her painting-school had been to teach the four children in one lesson to color engravings carefully and well, so as to produce four pretty and well-painted panoramas, she would certainly have been very much disappointed at the result. But this was not her expect-



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tation at all. Her object was in this painting-school, not to *produce pictures*, but to *amuse children*, and give them a good time in a new way. Whether the work which they attempted to do should be well done or not, in the eyes of an artist, was a secondary consideration, provided that the children were pleased with it themselves, and were happy while they were doing it.

There was another advantage which resulted incidentally from Mary's plan, which she did not think much of herself, but which was real and important, — and that was the cultivation and improvement which the work afforded the children, both in their ideas and in their manual dexterity, — that is, their adroitness and skill in the management of their fingers and hands.

In the first place there was an improvement in their ideas. That grass is green, and skies blue, and chimneys red, are truths so well known to older children that they can scarcely imagine that anybody can be so young as to have to learn them for the first time. But so it is. There is an age in every child when things so sim

ple and obvious as these are new to them.

A mother was one day walking in the fields with her little girl, who had just learned to talk and barely knew the names of the colors. "Look up into the sky," said her mother, "and see what color it is." "Blue," said the child. "Right," said her mother; "that is exactly the right answer. The sky is always blue." — "Is it?" said the child. And she gazed quite intently at the sky, wondering that it should be always blue. It was a new thought to her, and a very curious one. "Only there are white spots in it," said the child.

"Ah!" said her mother, "those are clouds. Clouds are white and gray, and sometimes almost black; but the sky itself is always blue.

"And now," said her mother, "look over the fields, and tell me what color the grass is." — "Green," said the child. "Yes," said her mother; "and grass is always green in the summer." — "So it is," said the child; "but I never thought of it before."

In the same way the little instruction

which Mary gave the children about the proper color of the various elements of the landscape, were real lessons to them, that advanced them in knowledge, and in the cultivation of their minds. Before such things are explained to them, little children, if you give them colors and a brush, and a picture to paint, will be as ready to paint the chimneys green, or a horse purple, or a cow blue, as in any other way.

In the same manner the children were improved in respect to their skill in managing their hands and fingers, by the exercise which Mary gave them. It was only a beginning, it is true, and the brushes often went over the lines, and so put on the color where it ought not to go, for their hands and fingers had not been at all trained to such minute and delicate operations. So they were continually going over the boundary line, and making what an ill-natured person might have called daubs and blotches. Still as they *tried* to keep within the line, and made some tolerable approach toward doing it, Mary was satisfied with them, and they were pretty well satisfied with themselves and with their work.

She was right in being satisfied with them. Of course when people are beginning, all they can do is to begin.

Mary allowed the children to paint for an hour, and then she required them to put their work away, and go to play. They were very much pleased with what they had done. During this time they had interchanged the saucers several times ; for, as fast as any two had painted all those parts of their pictures which were to be done in one color, they exchanged saucers and brushes, and then both proceeded with a new color. Of course they were continually coming to Mary at her seat, sometimes with questions for her to answer, sometimes to ask her whether what they had done was not done well, and sometimes to get a new supply of color. Besides, they liked to jump up and down from their seats, for the sake of the motion and change.

When the hour had expired, the pictures were all put away, and the children went to play with the swing and with the rocking-boat ; and then, after a while, they went away altogether, with an understanding



that there was to be another school the next Saturday, to finish the panoramas.

The panoramas were, however, never finished. The next Saturday there was a great Sunday-school picnic in the woods, and all the children went to it, and before there was another opportunity for Mary to resume her course of instruction in painting, Lucy Jane went home. Before she went, however, Mary selected a number of the prettiest pictures and made a long roll of them for her,—the first in the roll being the one which Lucy Jane had painted at the school.

Lucy Jane was much pleased with this panorama. She took it with her when she went away, intending to finish painting it as soon as she got home.

## CHAPTER VI.

## PISTILS AND STAMENS.

ONE afternoon, John and Benny, with Mary and Luly, went to see Lillie May. They took the carriage with them, intending to give her a ride.

They had proposed to go while Lucy Jane was at Mrs. Gay's making her visit, and to take her with them. But when they explained to her that Lillie could not walk, but had to stay in a chair with wheels to it, all the time, and be wheeled about wherever she wished to go, Lucy Jane said she did not wish to go and see her, and they could not persuade her to change her mind by all that they could say.

Lucy Jane seemed to be afraid to go and see her, as children are often afraid of persons that are sick.

So they put off going to make their visit until after Lucy Jane had gone home, and

then they took the first opportunity to go by themselves.

When they arrived at the house, they went in by the little gate, and up through the yard, and so round to the back piazza, which was the place where Lillie was usually to be found on pleasant summer days. As they expected, they found her there on this occasion.

She was seated in her wheeled chair, and had some flowers before her, which she seemed to be pulling to pieces. She had two or three thin books before her, upon the tablet or leaf which was placed across the arms of her chair, and which served her for a table. These books were made of sheets of newspaper folded to about the size of note-paper, and sewed together. On one corner of the tablet were two thin boards, of the same size with the books. These boards were placed together, and had a strong cord wound several times around them.

When the children came, Lillie seemed to be employed in pulling her flowers to pieces, and spreading out all the parts carefully on one of the pages of her book.

She looked up from her work when she saw the children coming, and greeted them with an appearance of great delight.

"Ah!" said she, "how glad I am that you have come."

"What are you doing with the flowers?" asked Mary. "You seem to be pulling them all to pieces."

"Yes," said Lillie. "I am getting out the pistils and stamens."

"The pistils and stamens?" repeated Mary.

"Yes," said Lillie; "these little things that grow inside the flowers."

"What are you doing that for?" asked Mary.

"So as to learn botany one of these days," said Lillie. "I want to learn botany to teach my scholars."

"Your scholars?" repeated Mary, surprised. "I did not know that you had any scholars."

"No," replied Lillie, "I have not got any now; but when I grow up I mean to have a little school,—that is if I can get any scholars,—and I shall want to teach them botany, and so I am going to

learn now, myself, if I can. And I am doing this so as to have the flowers all ready whenever I can find anybody to teach me."

"But you are pulling the flowers all to pieces," said Luly. "That spoils them."

"No," said Lillie, "not for botany. I am getting out the pistils and stamens. All depends upon the pistils and stamens."

"What are the pistils and stamens?" asked Luly. "Let me see."

So Luly and the others gathered close around Lillie's tablet, and she showed them what the pistils and stamens were. But Luly and Benny did not understand very well.

"How did you know about them?" asked Mary.

"The minister told me," said she. "He was here yesterday, and I told him that I wanted to study botany, and asked him how I should do it. He said that he did not know botany himself; if he did he would teach me. But he said he could tell me something about it, and so he did."

“What did he tell you?” asked Mary.

“He said it all depended upon the pistils and stamens in some way; and that to begin I must get as many flowers as I could, and pull them to pieces very carefully, and get out the pistils and stamens, and press them, and arrange them in order, and then they would be all ready when I found somebody that knew botany to explain to me what it all meant. And that is what I am doing.”

This account given by Lillie of what the minister had explained to her was not very clear, for Lillie was not accustomed to repeat long explanations. I can perhaps make it somewhat more full.

There is something very curious about the way in which plants grow, and what they grow for. A lily, for instance, grows to make the flower, and the flower grows to make the seeds, and the seeds grow to make another lily, which in its turn makes more flowers, and they in their turn make more seeds, in order that they in their turn may make more lilies, and so on in an eternal round.

It is so with the rose. The rose-bush

grows to make more roses. The roses grow to make more rose-seeds, and the rose-seeds grow to make more rose-bushes again, and so on forever and ever.

Now there are a great many parts produced in all this process. Take the rose for example. There are rootlets that spread out beneath the ground to draw in the nourishment, and there are stems and branches to support the leaves and flowers, and there are bush-leaves to gather nourishment from the air and light and warmth from the beams of the sun, and flower-leaves to form the flower, and pistils and stamens inside of it to form the seeds.

Now it is found that all these things vary infinitely except the pistils and stamens, and they in the same plants remain always the same.

If you had in a flower-garden twenty flowers of the same kind, — such as pinks, or balsams, or morning-glories, — and were to dig up several plants of any one kind and try to count the roots, you would find that there was a different number for each one; and so if you were to count the

branches above-ground, you would find them infinitely varied in number and arrangement.

It would be the same with the number and position of the flowers. There might be fifty flowers upon one morning-glory root, and twenty upon another, and perhaps two hundred on another, according to the thriftiness of the plant that they grew upon, or the richness of the soil.

But when you come to the pistils and stamens, the case is different. These in every plant of the same kind are alike. Just as many pistils and stamens as there are in one lily, just so many there are in all lilies of the same kind — on every plant and in every garden in the world ; and so with every other plant or flower.

It is true that sometimes the number of stamens is very large ; as, for instance, in the rose, or in the apple-blossom, — so large in fact that they cannot be easily counted ; and in such flowers as these the number is not always the same. But in such cases there is always something in the arrangement of them, in relation to the flower, or to the pistils, which is the same in every flower.



As soon as the people who were studying plants and flowers found this out, they concluded that it would be a good plan to classify them all according to the number and arrangement of the pistils and stamens. And this is the reason why the first thing you have to do in studying botany, is to examine the pistils and stamens of the plants, and count them if they can be easily counted, and if not, see how they are arranged.

This is what Lillie was doing. She was pulling the flowers to pieces and getting out the pistils and stamens, and pressing them by themselves. Then when they were dry she would gum them very delicately upon a sheet of white paper, and also gum some of the flower-leaves by the side of them, and the little green cup called the calyx that grows under the flower in most cases, and then she would write the number underneath, — *two* stamens, or *six* stamens ; and *one* pistil, or *four* pistils, as the case might be.

She had prepared nearly all the flowers that grew in the garden in this way, and now she wished to find some more.

"The next time you go to take me to ride," said she, "I want to go into the fields and woods where I can find some more flowers."

We will go this very day," said John.

## CHAPTER VII.

## BRIDGE-BUILDING.

LILLIE was very much pleased with this proposal, and she immediately proceeded to put the flower that she was at work upon into her press.

The press, as she called it, consisted of the two thin boards which have already been mentioned, and the cord by which they were to be bound together. There were also two wedges that were to be crowded in, one on each side, between the cord and the boards, when they were tied together. This of course had the effect of pressing the boards together, not with very great force, it is true, but flowers do not require anything but a gentle pressure.

Lillie had arranged the pistils and stamens, and all the other parts of the flower which she had been dissecting, upon a sheet of white printing-paper, — printing-paper being better than writing-paper for

such purposes, as it absorbs the moisture better. This sheet was double, that is, it was folded so as to form two leaves like a sheet of note-paper. Lillie had distributed the parts of the plant over the inner page of this paper, and then having folded down the other leaf over it, she slipped the sheet in between the leaves of one of her newspaper books, and then putting that, together with several other newspaper books which she had prepared beforehand, between the two thin boards, she wound the cord round them several times, and tied it, and then crowded the wedges in, — one on one side and the other on the other.

Then she trundled her chair along to her little cupboard, and put the press upon a shelf.

“There,” said she, “now I am ready.

“Or at least I will be in a minute,” she added, “as soon as I have put on my bonnet and shawl.”

So saying, she trundled her chair along to a closet. She opened the door of the closet, lifting up the latch by means of a ring attached to the end of a stick like a cane, which she always kept in her chair.

When the door was open, she brought her chair up so near that she could reach in and take down her bonnet and shawl.

She could do this without any difficulty, for the closet was very shallow, — only deep enough for shelves above, and a space below where Lillie hung the articles-of-dress she wore when she went out-of-doors.

Mrs. May, Lillie's mother, helped her in getting ready, and then said, —

“ If you are going into the woods, children, you will need some luncheon, and I will put some up for you.”

“ We have got plenty of luncheon,” said John. “ We brought it with us.”

“ And have you got anything to drink ? ” asked Mrs. May.

John said that they had not brought anything for drink. They were going to find a spring in the woods, he said, and drink the water.

So the children pushed Lillie in her chair out to the front door, and so down the inclined planes which her brother Caleb had fitted at the door and at the margin of the platform of the piazza, to enable the wheels to go down.

When the chair had been thus carefully trundled down into the yard, John and Mary lifted Lillie out of her chair and placed her in the little carriage.

Just before they were ready to set off Mrs. May came out with two bottles in her hand. She said that they were bottles of milk, and told the children that she thought she would put them in the carriage, so that they might have something to drink even if they should not find any spring.

“Yes,” said Luly, “that will be very nice; and now that we have got some milk, I would rather *not* find any spring.”

The truth is, that Luly was particularly fond of Mrs. May's milk, which she thought was better than any other milk that she ever tasted. -

Indeed it was not at all surprising that Luly should entertain this opinion, for Mrs. May was so much pleased to have the children come and see Lillie, and do so much to amuse and entertain her, that she wished to gratify them in return by every means in her power; and whenever she gave them any milk, she always took the freshest and newest that she had, and also put into it a

good supply of cream taken off from some of the other pans.

When all was ready, the party bade Mrs. May good-bye, and set off on their expedition.

“And now, Lillie,” said John, “which way shall we go?”

“Whichever way you please,” said Lillie, “if it is only to some place where there are plenty of flowers.”

“Then,” said Mary, “we will go to my mother’s wood lot. There are plenty of flowers there, and we can do anything we please on our own land.”

The usual way by which Mary and Luly went to the wood lot, as they called it, was by the lane which led along by the garden-fence behind their mother’s house; but there was a way of going to it from the other side, which was the side toward the house where Lillie lived.

There were, however, originally two difficulties in the way of getting into the wood lot in this direction, — one was, there was a fence in the way, and the other, that, after passing the fence and going on a little distance down a descending path, there

was a brook to cross. John had however, before this time, contrived plans for surmounting both these difficulties.

As to the fence, he found a place where the lower board was very wide, and this board he contrived, by hewing off a little at each end, to arrange in such a manner that it could be slipped out and put in again, so as to allow of a passage through for the carriage. It is true that, when the carriage was passing through, Lillie was obliged to hold her head down very low, but she did not care anything about that.

As for the brook, John chose a place where it was quite narrow and ran between rather high banks, and then, one day when he was at Mary's house and Jotham was going to the wood lot with his cart, he put five boards upon the cart, in order to make a bridge. Two of the boards were wide, and three were rather narrow. The difference was such that when the two wide boards were placed side by side, they made together very nearly the same breadth as the three narrow ones did, when *they* were placed side by side.

That is to say, the narrow boards were



each two thirds as wide as the wide ones, — that being the proper proportion to make the united breadth of the three narrow boards equal to that of the *two* wide ones.

You can make the calculation yourself.

Each of the three narrow boards were two thirds the width of the wide ones, and that makes six thirds in all. Now six thirds being exactly two, — that is, each of the two wide boards having three thirds in it, the space would be the same.

The reason why John chose boards of these dimensions will appear very soon.

Jotham hauled the boards upon his cart down into the wood lot, to the place where he was at work, and then John took them and carried them, one at a time, to the place where he was going to make his bridge.

The bridge was made very soon when all the boards were brought to the ground. First John laid down the two wide boards, side by side. Then he placed the three narrow ones over them, and they exactly covered them, as it has been shown that they would do ; but the crevices between the boards of the two sets did not come under

each other. By having two below and three above, the two tiers were laid so as to "break joints," as the masons say, which made the bridge much stronger and stiffer.

The reason was that the middle board of the upper tier, which was the one that any person going over the bridge would usually walk upon, came over the seam between the two boards below, so that half of it rested on one board and half on the other. Thus the board walked upon had both boards below to support it, instead of one.

John walked over his bridge and stood upon it in the middle, and jumped up and down upon it a little to see how firm it was.

"Yes," said he, "Lillie won't be at all afraid to go over here now. If I only had a hammer and nails, so that I could nail the boards together, it would be quite a nice bridge."

John resolved that he would bring down some nails the next time he came, and nail the boards together. In the mean time, however, before he had an opportunity to do this, he came one day with Lillie and

the other children, and found that Lillie was not in the least afraid to be drawn over the bridge. It proved also, on trial, that the carriage went over very smoothly and safely.

So he did not consider the nails essential after all. Still he determined to bring them some day.

He however entirely forgot one thing, which is quite essential for such a bridge when built across a brook that is liable to be swollen by rains, and that is to anchor it, in order to prevent its being carried away by freshets.

Sometimes they anchor such a bridge by placing heavy stones upon it along the sides. Of course, in such a case, the bridge must be wide enough to have room for a roadway between the rows of stones. John's bridge was hardly wide enough for this.

The best way for John to have anchored his bridge would have been to have nailed the boards together, and then to have driven down four stakes into the bank at the four corners of the bridge, with a fork projecting from each stake over the edge of the

board, to pin it down. Stakes of this kind can easily be made by cutting down small trees, or stout bushes, in the woods, choosing such as have a branch growing out near the ground, to form the fork. This branch must be cut off at the right length, and all the other branches trimmed off entirely; and the stem itself must be cut off of the right length to form the stake. This must then be turned over and driven into the ground, upper end down, and in such a position that the fork shall come down at length upon the corner of the bridge, and serve to pin it.

John might have done all this, just as well as not, if he had only thought of it. But the danger of his bridge being carried away by the freshets did not come into his mind.

At the place where John built his bridge the brook was narrow, and the banks mossy and rather high, — that is, about one or two feet above the water. A little way above there was a broad and shallow place where the path went through the brook. For the brook was so small that the oxen could walk directly through it, and so could

the cows and the horses whenever they wished to go across. Whenever there were men or boys to go over they could do it by jumping along by the stones.

But neither of these plans would answer for Lillie in the carriage, and so John built the bridge, choosing a place a little below, where the banks were of such a form as to answer the purpose of abutments, to support the ends of the boards.

He had to smooth the way a little, from the path on each side to the two ends of the bridge, so as to be able to draw the carriage to it and from it, without too much jolting; but this work was accomplished very easily, and then — except the railing, which John postponed, and the anchoring, which he did not think of — everything was done.

## CHAPTER VIII.

## CAUGHT IN A SHOWER.

AND now we return to the children going out into the woods to find some flowers. They went on together, talking very merrily by the way, along the high road, until they came to the place where they were to go through the fence. John took the board away, and immediately Luly and Benny crept under. Then he and Mary drew Lillie through, — she bending her head over to one side, and crouching down as low as she could into the carriage.

John and Mary drew the carriage along very gently too, watching Lillie's head all the time, so as to be sure not to touch it to the board above.

When all were through, John replaced the board, and then they went on.

They had to go more slowly and carefully now, for the way was not so smooth over the grass and upon the pasture-paths,

as it was in the high road. So they advanced very carefully, Lillie keeping a watch all the time on each side of the way for flowers. When she saw any that she thought she would like, Luly and Benny gathered them for her.

From those which they brought her she selected a number of the best specimens, and threw the rest away. Those that she retained she laid carefully in a basket which she had brought with her for the purpose.

"*I mean to study botany too,*" said Luly.

"And I," said Benny.

"Yes," rejoined Lillie, "you and Luly might begin with studying the leaves. See how many different kinds of leaves you can find, and press them, and when they are all dry you can gum them into a book, as I do my stamens and pistils."

"Are leaves botany?" asked Benny.

"Yes, they are a part of it," said Lillie. "I suppose they are the first part."

The two children immediately began to look out for leaves, and to gather as many different kinds as they could find.

"Only," said Luly, looking up suddenly

as if a new idea had struck her, — “I have not got any press.”

“Hoh!” replied Benny. “You can make a press yourself.”

“How?” asked Luly.

“Fold up a newspaper again and again, till 't is small enough,” said Benny, “and then cut open the folds with a paper-knife, and sew the back, and so make a book. Then you can put your leaves in the book and lay it on the floor somewhere, and put a great heavy stone upon it.”

“But I can't lift a great heavy stone,” said Luly.

“Oh, I don't mean so heavy as that,” said Benny, — “only one as heavy as you *can* lift.”

Thus talking, the party went on until they came to the bridge. Luly and Benny went forward cautiously toward it, looking pleased but half afraid.

“Wait a minute till I come,” said Mary, “and I will help you over.”

“No,” said Luly, “I want to go over myself.”

So she and Benny went over, stepping very carefully, and looking somewhat afraid,



and after they had safely reached the other side, they began capering about upon the grass, with a feeling of triumph and joy at having braved and surmounted the danger.

Even Lillie felt something like fear, while her carriage was going over, but there was only just danger enough to make the passage exciting and pleasant.

There were woods all around them, at the bridge, or rather clumps of trees, and thickets formed of bushes; but Lillie said she wished to get some real wild-flowers, and so they would go into the deepest wood that they could find.

They accordingly went on.

They soon struck the road which Jotham's team had made in going and coming, and following this they arrived before long at a very thick part of the wood, where, though a great many trees had been cut down, a great many others were still standing, while below the ground was encumbered with fallen trunks, heaps of branches which Jotham had thrown together, and piles of wood and of bark, ready to be hauled away as soon as the snow should come.

When the children reached this part of the wood they came to a halt, and after spending some time in gathering flowers, they concluded that it was time for them to have their luncheon, or rather their picnic; for as it was now about the middle of the afternoon, the refreshment which they were going to take could hardly be called a luncheon. They might have called it a *collation* — only they did not happen to know that word.

John made a table for the party by means of a large sheet of hemlock-bark which he took from a pile of bark near by. These sheets of bark, though very rough on one side, are very smooth on the other; and one of them, with the smooth side up, makes a very good table.

John made legs for his table by driving four stout stakes down into the ground. He cut these stakes with a hatchet which he had brought with him in the little carriage. He always took a hatchet with him when he went into the woods.

The children had a very fine time eating their collation and drinking the rich milk which Mrs. May had given them; until

all at once John said that it seemed to him that it was very dark.

"That is because we are in the woods," said Mary. "It is always dark in the woods."

"Never mind," said Lillie. "We don't care if it is a little dark."

John looked up, but he could not see much of the sky, on account of the trees. Where he *could* see it, it seemed to be piled up with a mass of rounded clouds.

"The sky is full of clouds," said John.

Mary looked up to see. "Never mind," said she; "they are all bright clouds. Such bright clouds as those will not do any harm."

John however felt somewhat uneasy. The upper edges of the clouds, where the sun shone upon them, might very well, he thought, be bright, while farther down in the sky, where he could not see, they might be very dark and heavy.

The party, however, had just begun their collation, and he knew that they would be much disappointed at being obliged to give it all up suddenly and set out for home for fear of a shower, when after all

there was no certainty that there was going to be any shower.

So they all went on with their eating and drinking,—talking at the same time together in a very merry manner,—until at length their attention was suddenly arrested by the sound of a long and rumbling peal of thunder.

The sound called forth a general exclamation of surprise and fear from almost all the children. Lillie was more frightened than any of the rest.

“Dear me,” she said in a very desponding tone, “now we are going to have a shower,—a thunder-shower,—and what shall we do? We must go home as quick as we can. And I am afraid that we can’t get home now before the shower comes on.”

John ran out to the road where there was of course more of an opening through the trees, and where he could see the sky toward the west. The sky was completely full of dark and heavy clouds, which seemed to be rising rapidly, and the lower portions of them were full of driving rain.

Just then another louder peal of thunder

was heard, and John hurried back to the place where he had left the children. He found them in a state of great trepidation and alarm.

“There is a shower coming up,” said John, “and I don’t think we should have time to get home before it comes. But that is no great matter. I can make a place with these sheets of bark where we can stay till it is over. It won’t last long.”

John immediately drew up the little carriage with Lillie in it, close to the side of the pile of bark. He then climbed up upon the pile ; and taking up some of the widest sheets, he placed them in such a manner that one end of each should project over the carriage, so as to cover it. He laid down in this way a row of these projecting sheets long enough not only to cover the carriage, but also a sufficient space besides to contain all the rest of the party.

He then laid other sheets over this first tier, in such a manner as to break joints with it, and so prevent any rain from coming through.

After he had done this he took off a number of the widest sheets that he could find, and slid them down gently to the ground. Then coming down himself, he carried these sheets, one by one, to the place where he had made his projecting roof, and set them up under it in a line. The other children helped him in doing this, — Mary and Benny holding the upright sheets in their places, while he lifted the ends of the projecting ones a little, in order to put them under.

In this way in a very short time quite an effectual shelter was made, sufficient to contain all the party. Lillie and her carriage were already in it, and when it was done the other children crept in too. John then put up very wide sheets of bark at the two ends — though he could only close the openings very imperfectly in this way.

Indeed no part of the hut which he made was tight except the roof; and that — on account of the double tier of sheets, laid over each other, so as to break joints, that is, so that the joints in the lower tier should all be covered by the sheets of the upper one — was very tight indeed.

The roof was, in fact, the only part that it was very important to make perfectly tight, inasmuch as if the rain could be prevented from coming in from overhead the party would be all pretty well protected, for it was not to be expected that much could come in at the sides.

This was what John said to the other children when he was finishing his work.

"It is not much matter about the side and ends," said he. "All we care for is the roof."

"But the wind will blow the rain in through all these great cracks," said Mary.

"No," said John. "There will not be any wind to drive the rain in upon us. There is never any wind in thick woods. The trees stop it. It blows along on the tops of them, but it does not blow near the ground."

All the time while John had been at work, the thunder had been growing louder and louder, and seemed to be coming nearer, and before he was finally ready to creep in himself under the shelter, the big drops began to fall.

The children were very much alarmed,

but their fears were in some degree mitigated while John was building the hut by the curiosity and excitement they felt in watching the process. But when it was all over and there was nothing to be done but to sit crouched in such a dark and gloomy place, and listen to the peals of thunder, which now rolled louder and louder, and seemed to come nearer and nearer, and especially when they began to see the flashes of lightning, and to hear the rain pouring in torrents upon the bark roof over their heads, and running in great streams down to the ground, it seemed to them that they were in a very solemn situation indeed.

Still the calmness and composure which John displayed had a great effect in sustaining their courage, and when at last he told them that the shower was beginning to pass by, — he knew it by the sound of the thunder, — they began to feel quite relieved. Not long after this, too, the rain began to abate, and the roaring of the wind in the tops of the trees, which had been for a time quite terrific, was evidently abating. These signs of improvement



gradually increased, and as they increased the children rapidly regained their cheerfulness. In a word, they soon began to be quite merry ; and when at last the rain had nearly ended, and they saw by peeping out that the sun was shining again among the tops of the trees, they were almost beside themselves with exultation and joy.

## CHAPTER IX.

## THE FRESHET.

LULY and Benny were eager to go out again into the open air ; but as some drops of fine rain were still falling, John and Mary kept them in.

" Besides," said John, " I don't think we quite finished our picnic, and we will eat some more now, before we set out to go home."

So John opened the basket, and they began to eat and drink again with fresh appetites.

" We must stay here a full quarter of an hour," said John, " after it has done raining, to let the ground dry up a little."

The paths dry very fast after a summer shower, on account partly of the ground being so warm, by reason of the heat of the sun which has been shining upon it all day before the shower. Warmth hastens the evaporation of moisture very much,

and this is the reason why we hold anything to the fire when we wish to dry it quick.

To wait for a quarter of an hour for the ground to dry after a long cold rain early in the spring would do very little good; but there would be a great advantage in it after a summer shower falling on hot and parched ground.

At length John, after going out once or twice to make a reconnoissance, as he said, decided that it was time to go.

"And now, Luly," said he, "I want to get you home without the least drop of wet upon any part of your dress. So you must draw your clothes close around you, and keep entirely away from the sprigs, grass, and weeds that grow along the sides of the path.

"You see the little rogues," continued John, "have got drops of water all ready treasured up and hidden, and when you come along they will try to bend over and touch these drops upon your dress. Watch them well, and don't let them do it."

There was not, however, much danger of the children's getting their clothes wet, for

the path itself was beginning to become quite dry, and the grass along the sides of it was generally very short and low, as it usually is in pastures. John drew the carriage containing Lillie; Mary and the other children followed. Benny, who had no skirts to take care of, took hold of the carriage behind, and helped by pushing.

Thus they went on very prosperously and safely until they began to draw near to the place where they would have to cross the brook, when all at once their attention was attracted by an extraordinary roaring and rushing sound, as of a torrent of water.

“Hark!” exclaimed Mary. “What’s that?”

“The water must be up in the brook,” said John. “It will be lucky for us if our bridge is not carried away.”

After going on a few steps further they came to a turn in the path which brought the brook into view. John saw at a glance that the bridge *was* carried away.

The water was pouring in a torrent through the broad and shallow place where the path crossed it, and above and below,

where the banks were more steep and the channel narrower, the water had risen over the margin and had spread among the bushes and trees in the thickets. Among these bushes and trees, a short distance below where the bridge had been built, several of the boards had become lodged.

The children were overwhelmed with astonishment and alarm at witnessing this spectacle. They turned toward John in great distress, not knowing what they were going to do. John said nothing, but stood looking at the boiling and whirling torrent of water with calmness and composure.

"Our bridge is all carried away," said Mary.

"Yes," said John.

"And I don't see any possible way for us to get over the brook," added Mary.

"It looks very discouraging," said John, "certainly."

He said this however in so calm and quiet a manner, that the children were rather reassured than made more despondent by his words.

"I see some of the boards of the bridge lodged in the bushes down below," said

Mary. "Could n't you get them back and build the bridge again?"

"No," said John. "There are only a few of them there; — not enough to build the bridge with."

"Then," said Mary, "I don't see what we can do."

"Neither do I," said John, "but we have time enough to consider."

So saying, John drew the little carriage out to one side of the path, where there were some flat stones that made a good seat. He told the children that they might sit down there and rest themselves, if they chose, while he considered what to do.

As for Lillie, she had remained perfectly quiet all this time, and had not said a word. She had great confidence in John's being able in some way or other to extricate them from their difficulty, and in order not to do anything to hinder him in his planning, she thought that the best thing that she could do was not to ask any questions, or distract his attention by offering him her advice. Lillie was a very sensible girl.

John left Lillie in her carriage with the other children, near the rocks, and then tak-

ing the hatchet out of the carriage he went to the margin of the thicket and cut a pole. He carried the pole down to the brook, at the place where the path crossed it, and began sounding the depth of the water with it, — that is, putting the end of the pole down into the current, to ascertain how deep it was.

It was not very deep. When water in a brook runs rapidly it is seldom very deep.

“I think I can wade across here,” said John, “and I am going to try. I shall go very carefully, and feel the way before me as I go, so you need not be afraid.”

So saying, John took off his shoes and stockings, and waded into the water, feeling his way with his pole as he went along. When he reached the middle of the brook the water was nearly up to his knees, but he succeeded in keeping steady upon his feet, and stemming the current, and soon the children had the satisfaction of seeing him ascend safely to the dry ground on the other side.

“There,” said he, “you see I can come through the water perfectly well. Now I am going to bring you all over, — though first I am going to make a railing.”

So saying, John went back through the water again, counting the steps as he went, so as to get an idea how long a pole would be required to reach from one side to the other. He then went to the margin of the thicket and selected a tall and slender young tree, with a stem which he estimated would be long enough for his purpose.

It took him some time to cut this tree down. It was about six inches in diameter where he cut it off. After it was down he trimmed it up very near to the top, and then cut the top off. Thus he had a long and stiff pole, long enough to reach across from one side of the brook to the other at the lower part of the ford, where John was intending to cross.

The object which John had in view in wishing to place this pole across the brook at the place where he was intending to carry the children through, was not merely its usefulness as a material support for himself, but as a moral support for the children. He thought that if he were to attempt to carry them over in his arms, through such a raging torrent, with nothing between



them and the deep and dark waters that they saw eddying and whirling among the mossy banks and dense thickets below, they would be afraid, but that their fears would be very much diminished if they saw a good stout pole — or rather trunk of a tree as they would call it — laid across the stream, to form a barrier which would intercept and save them if by any chance they should fall into the water.

It was very right for John to reason thus. When a gentleman has ladies under his charge in cases of difficulty or peril, it is not enough for him to take measures to guard against the actual danger: he must also take into the account, and make allowance for, their natural fears.

It will not do for him to say their fears are unreasonable and foolish, and that he will not pay any attention to them. Whether reasonable or not they are unavoidable, and they ought not to be disregarded. Fear is pain, and if you save any one from fear, you of course save them from pain. And unreasonable fears are as painful as any others.

When the children saw John trimming

up the stem of the tree, they wondered what he was going to do with it, and they asked him the question.

"I am going to make a sort of railing with it," said he, "to put across where I am going to ford the brook."

"I don't see how you are going to contrive to get it across," said Mary.

"I have thought of a plan," said he. "You will see whether it succeeds or not."

John then called Benny to help him, and they together contrived, by lifting one end of the pole at a time, to move it along from the place where it had fallen to the bank of the brook, with one end of it at the place where he intended that end to rest.

"And now," said John, "the thing is to get the other end to the other side."

"Yes," said Mary, "and that is something that I don't believe you can do."

John said nothing, but went coolly to the other end of the pole and pushed it off into the current. As soon as it was afloat the current took it, and it began to drift slowly away from the brink,—that is, the end that John pushed into the water did,—while the other end, which rested on the bank, remained still.

The upper end slowly floated out, until at length, taking the full force of the current, it was carried down more and more rapidly, until at last it reached the other bank, where it was suddenly stopped.

John then at once waded across the brook, and lifting the farther end up, he placed it securely on the bank, and his railing was complete.

He then came back, walking slowly through the water, and resting his hand upon the railing, to show Lillie how convenient it was.

"There," said he, "you see how safe it is. I can bring you all over very easily, and can hold by the railing if I wish. You will not be afraid, shall you, Lillie?"

"No," said Lillie. She seemed, however, to speak somewhat hesitatingly.

"I can carry Benny over first, if you wish," said John, "so that you may see how safe it is."

"No," said Benny; "I want to wade over myself."

"But you must not wade," said Lully, looking anxiously and earnestly at Benny; "you certainly must not. You must let John carry you."

"I don't know but that I might draw you over in the carriage," said John, still speaking to Lillie, "only I am afraid that the water might be high enough to come in and wet the inside of it."

"No," said Lillie, "I should not dare to go in the carriage. I would a great deal rather have you carry me."

"I will carry the carriage over first," said John, "and then when I get you over it will be all ready there for me to set you down into it."

So saying, John went to the place where Lillie was sitting in the carriage, and lifting her gently out of it, set her down upon a flat place on the rocks, leaving Mary and Luly to take care of her. He then drew the carriage down to the brink of the brook, and then taking it up in his arms he carried it through the water, and set it down in the path.

Then he went back for Lillie. As he walked through the water on his return, he stopped a moment in the middle of the stream, and said, —

"See! it is not very deep. I don't think it is quite so deep as it was when I came

over the first time." The water must be falling. Quick up and quick down is the rule for those little brooks after summer showers."

"I am sure that *this* is not a little brook," said Luly. "It is a very big one."

John came to the place where Lillie was sitting, and taking her up in his arms, and then drawing her feet well up under her dress, and wrapping her dress around them, he carried her down to the brink of the brook. She felt a little afraid, and putting her arm around his neck, she clung to him very closely.

"I will walk very slowly," said John, "and if you find that it makes you too much afraid you can tell me, and I will go back."

He stepped on cautiously, steadying himself by the pole, and after taking two or three steps, he said, "It won't be any deeper than this. This is the worst of it."

Then, after taking two steps more, he said, —

"Now we are past the middle. It is growing shallower now." \*

\* See frontispiece.

A few steps more brought him out safely, with his load, on the hard ground on the other side. He carried Lillie to the carriage, and set her down in it very gently.

"Now," said he, "it is Mary's turn."

"*I am going to wade over myself,*" said Benny.

"No," said John, "you must let me carry you."

Mary came down to the brink, and then John took her up in his arms and carried her safely over, setting her down by the side of Lillie's carriage.

Then he brought Luly over, and finally Benny. He went back, last of all, to get the hatchet which had been left on the rocks where the children had been seated, and then the operation of transporting his party across the stream was complete.

By this time the sun had dried the roads very much, and they all went on, feeling very light-hearted and gay at the thought of having no more difficulties or obstructions to encounter till they reached home.

In the mean time Lillie's brother Caleb, when he came to his supper that afternoon at about six o'clock, and found that Lillie

was not at home, asked where she was. His mother said that she had gone out with some children into the woods.

"Into the woods!" repeated Caleb. "Then they are completely drenched with the rain. There has been a pouring shower. I must go and find them."

"Oh no," said Mrs. May. "They are all safe somewhere, I have no doubt. They had John Gay with them, and he is a very good hand to take care of a party."

"Oh, if they have got John Gay with them, that is different," said Caleb. "He would take them in somewhere, I'm sure."

So Caleb sat down and ate his supper. When however supper was ended, and Lillie did not appear, he thought he would go and see what had become of the party.

So asking his mother which way the children went, he set off in that direction. But he had not gone far before he saw them coming along the road, all in the best of spirits, and with no signs of wet about any of them, except the bottoms of John's trousers, and they were almost dry.

"Why, children," said Caleb, "how did you escape getting wet by the shower?"

“ Oh, John took care of us,” said Lillie.  
“ He saved us from getting wet.”

“ And he saved us from getting drowned too,” said Luly. “ We came very near getting drowned in the freshet, — coming over the brook.”



## CHAPTER X.

## THE ELEPHANT.

"MOTHER," said Mary one day, when she was walking with her mother into the village, "if that great bench in the play-room was only a table instead of a bench, I could do a great many nice things there."

"Could you?" asked Mrs. Gay.

"Yes, mother," replied Mary, "very nice indeed. We had a very good time in my painting-school; but it is a great deal of trouble to carry up the ironing-board every time I wish to have a class there, or to use a table for anything, and I suppose that Sophronia would not be willing to have me keep it there all the time."

"I suppose not," said Mrs. Gay, — "for then I don't see what she would do about her ironing."

"Do you suppose that the bench could be turned into a table in any way?" asked Mary.

"I don't know," said Mrs. Gay. "Perhaps your cousin John could tell."

"Should you be willing to have it turned into a table, if John can do it?" asked Mary.

"Yes," replied her mother. "I think it would be much more useful as a table than as a bench."

"Then I mean to ask John the next time I see him," said Mary.

Accordingly the next time that John came to the house, Mary put the question to him whether a big carpenter's bench could be turned into a table.

"Do you mean the one in the play-room?" asked John.

"Yes," said Mary.

"Let us go and look at it," said John.

So John and Mary went up into the play-room, to look at the bench.

"You see, in the first place," said Mary, "it is too high."

"Yes," said John. So saying, he drew from his pocket a folding rule and a carpenter's pencil, two things that he always carried with him, and began measuring up from the floor, on the side of one of the legs of the bench.

“Two feet five inches,” said he, making a mark at a certain place with his pencil. “There! *that* is the height for a common table.”

“But we don’t want the table quite so high,” said Mary, “for it is to be used by children.”

“Still,” said John, “it is better to have it of the usual height, and so raise the seats when children are to use it — more or less — according to the ages of the children. In that way it will answer for everybody. But if you cut down the legs so as to make it right for children of one size, it won’t answer for any o’thers, and when the children all grow up, it won’t answer for anybody.”

“Well,” replied Mary, “then we will have it of the regular size. Can it be done?”

“Yes,” said John, “very easily. I can do it myself. I shall only have to saw off the legs, so as to make it two feet five inches high, and take off the side-boards and make them narrower.”

“Well,” said Mary, “then I wish you would do it.”

John said he would do it, and that he would bring the necessary tools the next time he came.

John then began to examine the table attentively, with a view of ascertaining beforehand all the difficulties which he should have to encounter in prosecuting the work. He found two difficulties which he had not thought of at first. .

One was, that the edge of the top boards only came just to the side of the bench, and did not project over it at all, as the top of a table always does.

"It will not be exactly like a table, after all," he said; and then he proceeded to explain to Mary how it would differ in respect to the top. But Mary thought that this would not be of any consequence.

He also found that it would be very difficult to take off the two side-boards that were too wide, in order to make them narrower, for these side-boards were not only nailed to the legs of the bench, but the edge of the top-board on each side was brought over them and nails driven in from above downward, and of course these nails would have to be drawn before the side-

boards could be taken off. This he saw at once would be a difficult thing to do, except by taking the bench almost entirely to pieces.

“And I don’t like to take it all to pieces,” said John, “for it is too large a thing for me to manage alone, to put together again.”

“Then is not there any way that you can do it?” asked Mary.

“I think that perhaps I can saw through the side-boards, from end to end,” said John, “and so leave a narrow strip at the top, as wide as I want, and knock off the lower part.”

“Well,” said Mary, looking very much pleased, “I should like to have you do it so.”

John said he would try; and then renewing his promise to bring the necessary tools the next time he came, he went away.

Not many days after that he came to do the work, bringing with him a bit and bit-stock, a key-hole saw, a splitting-saw, a square, a marking-awl, and a hammer. Benny came with him too, to help tip the

bench over and lay it down upon its side. Mary and Luly joined them, and they all went into the play-room together.

"Now," said John, "the first thing to be done is the hardest, and that is to move the bench out into the middle of the floor and tip it over, so as to lay it down upon its side."

"Oh, we can do that easily," said Benny; and he walked up to the bench and took hold of it at one of the ends, with an air of so much resolution, that it looked as if he intended to move the bench out and turn it over himself alone.

The others however soon joined him, and they succeeded pretty easily in moving the bench out into the middle of the room, by all taking hold together at one end, and lifting a little so as to relieve the pressure upon the floor, and so slipping it along a short distance, and then going and doing the same thing at the other end.

By working in this manner at each end alternately, they soon succeeded in moving the bench out far enough from the wall to allow of their turning it down upon either side.

John anticipated some difficulty in the work of turning the bench over, and at first he thought that perhaps it would be best to ask Sophronia to come up and help them. But he thought that they would try it first, and see how heavy it was.

So they all went to one side, and taking hold together, they lifted that side up a little way, and then while one or two remained to keep it so poised on the two side legs, John himself went round to the other side to hold it. When he had it secure, the others came round and helped him to lower it down gently to the floor.

And what do you suppose became of their fingers during this operation? For it is plain that unless some precaution had been taken to prevent such a result, their fingers would all have been caught between the bench and the floor, when the bench came entirely down, — unless indeed they had all let go of the bench while it was still at some distance from the ground, and pulled their fingers away, and so let it come down with a slam.

This of course John did not wish to do, and he had resorted to another method to

guard against the difficulty, — the method which workmen always adopt in such cases, — that is, he had put *skids* down.

Skids are bars of wood, or anything of that kind used as supports. John had procured two bars of wood, which he had found standing up in a corner of the play-room, together with several other pieces of lumber. These he had laid down upon the floor, crosswise, where the side of the bench was coming, in such a manner that the bench was supported by them an inch or two above the floor, and thus the fingers were saved.

“There!” said Mary, in a tone of satisfaction, when the bench was down; “that is all right. Only now how are you going to get the skids out?”

“We don’t wish to get them out,” said John. “They must stay there, so that we can get our fingers under easily when we are ready to lift the bench up again.”

“Now,” said Luly, “the first thing is to saw the legs off.”

“No,” replied John, “that is the easiest thing. We must do the hardest thing first, and that is to saw the side-board in two.



“There now!” he suddenly exclaimed. “I forgot to bring my chalk-line. I was afraid I should forget something. It is astonishing how many different tools it takes to do the simplest thing, — that is, if you do it properly.”

“What do you want the chalk-line for?” asked Mary.

“To draw a line along the board, to saw by,” replied John.

“Oh, you can saw straight enough by guessing,” said Mary.

“No,” said John. “No guessing in doing carpenter work. It is always a great deal easier to measure first than to mend afterward. I must draw a line somehow or other.”

“You must take a ruler and rule it,” said Luly.

“That would do,” said John, “if I only had a ruler long enough. But it would be hard to get a straight-edge ten feet long.”

Carpenters call a ruler a “straight-edge,” — perhaps because they often use for such a purpose a board which has only one straight edge, — one being all that is necessary for ruling.

John was so much of a carpenter that he was quite in the habit of using carpenter's language on all occasions.

"I could not very well get a straight-edge as long as this bench," said John, "and so I must have a chalk-line. I have got a piece of chalk in my pocket, if you could only get some twine."

Mary said that she knew where there was some twine ; and going at once to the case of shelves at the back side of the room, where there were kites and other play-things laid away, she returned very soon with a kite-string. John said that that would answer his purpose exactly.

So he measured off at each end of the side-board five inches from the upper edge, where the top-board came over it, and then fastening one end of the twine at one of the points marked, by means of the awl, he chalked the string and drew it to the point at the other end. Then straining the string tight, he snapped it against the board, and by this means made a chalk-line upon it, from end to end, — five inches from the upper edge.

He then began to saw, following the

chalk-line exactly. Before long, however, he came to the leg, and was obliged to stop, for if he had gone on he would have sawed the leg off, five inches from the top of the bench.

If he had gone on and sawed the legs off at that height, it would have made a table not high enough for a kitten.

"I don't understand how you are going to get by the leg," said Mary, "without sawing it off."

As soon as John came to the leg, he inclined the saw in such a manner as to continue to saw the board in front of the leg without cutting into the leg itself. In this way he succeeded in cutting into the board quite deep nearly across the breadth of the leg.

When he had gone as far as he could go safely with this process, he laid his saw down and took his bit and bit-stock, and bored a hole in the board, just beyond the leg, and upon the chalk-line. He then inserted the point of the key-hole saw into this hole, and sawed along the chalk-line until he had gone far enough to allow of his inserting the splitting-saw. He then

put the splitting-saw in and went on sawing with that until he had gone along the whole length of the board to the other leg.

Then he began at the other end, and sawed *to* the leg on that side, and also continued the cut in front of it by holding the saw in the right position for cutting through the board and not cutting the leg.

In this manner the board was soon cut through from end to end, and then John very easily knocked off the lower portion of it with his hammer, leaving a strip along at the top wide enough to support the top-boards and also to hold the legs firmly in their places.

"Now," said John, "the next thing is to saw off the legs."

So he measured two feet and five inches from the top of the bench, and marked the place on one of the legs that were in the air. Then, with his square and his awl, he made a mark on each of the three sides of the leg that were in sight, — so as to be sure to saw it off straight and square. He then sawed it off, and afterward did the same with the other leg.

After this had been done the children all

took hold of the bench again, by inserting their fingers in the opening between it and the floor, made by the skids keeping it up a little, and lifted it up. They found it a pretty heavy lift, but they succeeded in raising the bench and setting it on its legs again; though of course, as the legs on one side had been sawed off, it did not stand level.

“That was an excellent plan of yours, to put skids under,” said Mary. “What made you think of it?”

“Oh, it is not any plan of mine,” said John. “It is the regular way. Workmen always put something under when they are turning over any heavy thing. Did you never see them when they are at work upon a big stone, building a house? They always put something under it to keep it from lying flat upon the ground,—though that is not so that they can get their fingers under, but their crowbars.”

The children then went to work as they had done before, and turned the bench over upon its other side, taking care to put the skids down upon that side too. John then proceeded to saw the side-board from

end to end, so that he could knock off all except five inches in breadth at the top, and then he sawed the legs off, making them of exactly the same length as those on the other side.

"And now," said John, "we have got to get hold of the old fellow and set him up on his legs again."

So they all took hold and set the old fellow, as John called him, on his legs, and they found that sure enough the bench had been converted into a table.

Mary immediately brought the chair — for there was one chair that belonged in the play-room — up to the new table to try it. She found that she could sit up to it now perfectly well, the side-boards having been made so narrow that there was room for her knees to go under it.

The other children tried the table too, and then they all went and stood at a little distance from it to take a survey of it.

Just then they heard the sound of footsteps, as of some one coming up-stairs. It proved to be their uncle Edward.

"Uncle Edward," said Benny, calling out to him eagerly, "see what we have

been doing. We have been changing this bench into a table."

"Yes," added Luly, "and see what a nice table it makes. Only it has got rather big legs."

"Yes," said Mr. Edward. "It looks like a table afflicted with elephantiasis."

"What do you mean by that?" asked Mary.

"Why, that it looks something like an elephant," said Mr. Edward.

"We might as well call it the elephant," said John.

"Yes," said Mary; "so we will. That shall be its name."

## CHAPTER XI.

## ARRANGEMENTS.

ONE day Mary and Luly were looking at some pictures in a book which their uncle Edward brought to show them, and among them was a view of Osborne, which is a villa in the Isle of Wight belonging to the queen of England.

This villa is situated not far from the sea-shore, in a place that is very cool and pleasant in the summer. There was a little child named Alice looking over to see the pictures too.

"What a pretty place," said Mary.

"Yes," said Luly. "*I* should like to be a queen and have such a pretty house to live in."

"She does not live in this palace all the time," said Edward. "She only goes there a few weeks in the summer. But she is there now."

"How do you know?" asked Mary.



“I know by the flag being up,” said Edward.

So saying, Edward pointed to a flag which was floating from a flag-staff raised upon one of the towers.

“Always when the queen goes to Osborne,” said Edward, “they put the flag up, so that the people all around may know that she is there.”

“And then,” asked Alice, “must not they make any noise, and disturb her?”

“No,” said Edward. “If any of them were going to make any noise, or do anything that would trouble the queen, they would see that the flag is up, and so not do it.”

Edward explained to the children, that it was the same with all the other palaces that the queen owned, and lived in from time to time. Whenever she came to any one of them they put the flag up, and when she went away they put it down.

“I have got a very pretty little flag,” said Mary, “and I mean to put it up and take it down for something.”

After this conversation Edward and the children then went on to look at the other

pictures, and Mary forgot about the flag; but she remembered it some days afterward, when she first began to try the new table in the play-room.

She tried it first for a drawing-school. The painting-school had succeeded so well — although it had been kept for only one day — that Mary concluded to have another school of some kind or other; and after some deliberation she determined to have it a drawing-school.

When she proposed the plan to her mother, her mother approved of it entirely; but she told her that she would recommend to her three conditions to be observed in carrying the plan into effect. One was to have the *term* of the school fixed and limited; another, to have the number of scholars limited; and the third, to make the scholars pay for their tuition.

"But I don't think they can pay for their tuition," said Mary. "I don't believe they have got any money. You see they will be all very little things that will come to such a school as mine."

"They must pay in *work*," said Mrs. Gay. "You must find some work to do.

If you have four scholars, and you give them a drawing-lesson of an hour, then they must each work a quarter of an hour, to make up the same amount of time in working for you that you spend in teaching them."

"They could not do much in a quarter of an hour," said Mary.

"No, not in one quarter of an hour," replied her mother; "but you could wait until you had given them four lessons, and then they would each and all owe you an hour; and all four of them, working an hour, could do a good deal."

"Only," said Mary, "I don't know what I could give them to do."

"They might make some cushions for the chairs in your play-room," said Mrs. Gay. "You say you want some cushions, or something of that kind, to raise the seats of the chairs, so that the children can sit up to the table better."

"Yes, mother," said Mary, "but I don't know how to make the cushions."

"I will tell you how, when the time comes," said Mrs. Gay, "if you will form the plan, and get the children all ready to do the work."

Mary resolved to follow her mother's advice in requiring her scholars to pay for their tuition. After some farther conversation she resolved also to adopt her mother's recommendation in regard to the other two points, namely, to have the number of her scholars small and limited, and also to fix the number of lessons which she would have in her first quarter or term.

The reasons for having her number of scholars small are very plain, but for the other restriction they are not quite so obvious. It is, however, I think, very important that in all plans of this kind a fixed and definite time for their continuance should be agreed upon at the commencement.

If the children begin with a course of *four* drawing-lessons, for example, — no more and no less, — for the first course, they carry that idea in their mind as they go along, and feel that they are doing something that has a definite ending, and that not too far off. And as they approach toward the end, they feel as if they were accomplishing an undertaking, and are

pleased with the idea of doing one complete thing.

It is of course very easy, if the plan works well, to commence a second course after the first is finished; whereas if it does not work well, if the teacher gets tired, or the children get tired, or if unexpected difficulties occur, then the plan comes to an end of itself. The work undertaken is finished according to the original plan, and does not appear like an attempt and a failure, as it would have done if it had been begun with the idea of being carried on a long time, and then had been abandoned after a few lessons.

Mary determined to have her number of scholars limited to five, — two for each side of the elephant table, and one for the end. The other end of the table she reserved for herself.

As Luly was to be one of the scholars, the number to be invited from out of the house was four. Richard and Sarah were two, and Mary thought of two others. They were all very glad to come. Two of them also proposed others to join the class, — one was a cousin, and the other a

particular friend, of the one proposing her. Their names were Jane and Maria. But Mary said that her number was limited, and she could not take more than five.

"But there is room for two more," said one of the girls, — "plenty of room. Three can sit on a side just as well as not, and without any crowding at all."

"There are some other reasons besides crowding the table," said Mary, "and I am decided not to have but five for my first term."

"How long is the first term?" asked the girls.

"Four days," said Mary. "Two Wednesdays and two Saturdays, — an hour's lesson every day. You must each bring a pencil. I shall have some paper for you."

Mary thought that if the girls undertook to bring paper, they would get it so tumbled on the way that it would not be good to draw upon.

Mary's first idea was to make some little drawing-books for her scholars, but her mother advised her to cut out small sheets of drawing-paper, in the form of large cards, and let them draw upon those.

“Because,” said she, “if you make books for them, some of them will only begin their books and never finish them, and then all the paper will be wasted.

“Besides,” continued Mrs. Gay, “books are not so good as separate sheets, for young children, for the last pages get worn and tumbled before they come to them, and very often they do not come to them at all. They get tired and put the book away, and then afterward when they begin again they think they must have another book. Thus it happens that almost every child has two or three drawing-books, with a few drawings in the first few pages, and the rest of the leaves blank — and all more or less tumbled.”

“Yes, mother,” said Mary, “I have got two.”

“Then I advise you,” said Mrs. Gay, “to take one of those books and take out all the blank leaves and cut them into quarters, and so make drawing-cards for your class out of them.”

This Mary concluded to do, and she provided in this way sixteen cards, — all of the same size.

"Now," said she, "if they bring their pencils, we shall have all we want."

"Yes," said her mother, "except patterns for them to copy, or *models*, as the drawing-masters call them. What are you going to do for models?"

"I am going to let them draw something from my printed pictures," said Mary. "I am going to let each one choose something that she likes."

Mrs. Gay said it was a very good plan for them to draw objects selected from the pictures, but not to let them choose.

"You had much better choose for them," said she. "If they are to choose, they will spend half their time in doubting and hesitating and making up their minds."

Mary accordingly determined to assign to each of her scholars the portion of the engravings from the pictorial papers which they were to copy, and she proceeded to look over her collection with the view of selecting such as were suitable. Of course she did not design to give them the whole picture to be drawn, for some of the pictures were quite large; but to select from each some one thing, as a house, a ship, a



cannon, a man on horseback, or something of the kind.

After she had made the selections she took the pictures up to the play-room and put them around the table, at the places where the several scholars were to sit. She also wrote the name of each scholar upon a slip of paper, and distributed the slips around the table, at the places which she meant to assign to them, — taking care to put the two youngest nearest to *her* seat, where she could see better what they were doing, and the older ones, who did not need such close supervision, farther away.

These arrangements were all completed on the morning of the day when the school was to assemble for the first time. The day for the first meeting was Wednesday, and the time two o'clock in the afternoon.

## CHAPTER XII.

## FLAG UP! FLAG DOWN!

MARY had a very pretty silk flag, a little more than a foot long, which she determined to use in her school as a signal for silence and attention.

"I will have a place," she said to Luly, "where I can put the flag up and take it down; and when it is up they must all be still and attend to their drawing, and not speak a word."

There was a slender staff attached to the flag. This staff was between two and three feet long. While Mary was speaking of her plan, Luly took the flag in her hand, by means of the staff, and waved it in the air.

"Only," said Mary, "I don't see how I can put it up."

"Neither do I," said Luly.

"If John was here, and would only bore a hole in the end of our table," said Mary,

“then I could set the end of the flag-staff in the hole when I wished to put the flag up, and take it out and lay it upon the table when I wished to put it down.”

“Yes,” said Luly, still waving the flag to and fro.

“But he is not here to do that for me,” continued Mary, “and so I must try to think of something with a hole in it to set on the table.”

The best thing that Mary could think of was a bottle. She thought that a bottle would do very well. So she went to the china-closet and procured one, — a good heavy one, that would stand steady, and that had a mouth large enough to receive the end of the flag-staff.

She carried this bottle up into the play-room, and set it upon the end of the bench opposite to the one where she was going to sit herself, and near the corner.

She did not however set the flag up in the bottle, but laid it down upon the table by the side of it.

She also put a little table-bell near the place, to be rung whenever the flag was put up or taken down.

When the time arrived, and the children began to come, she told those that came first that Luly would show them their places at the table, and they might put their pencils down, each in her own place, and then that they might walk round the table if they pleased, and see what there was on it; but that they must not touch anything, nor ask any questions; and that after they had seen what was on the table as much as they wished, they might go and play with the swing, or with the rocking-boat, until the rest of the scholars came and she rang the bell for the school to begin.

The children liked the idea very much of having a little play before the school should begin; and after putting down their pencils, and looking very curiously at the flag and the bottle, and also walking round the table and taking a hurried glance at the pictures laid upon it for models, they ran off to the rocking-boat and the swing.

At length, after all the children had come and had all had a little time to play, Mary rang the bell for the school to begin, and they immediately all ran to their places and climbed up into their seats.

"What a good thing it was," said Mary to herself, "that I chose their places for them and marked them all myself. If I had left it to them, they would have all wanted the same seats, and there would have been nothing but scrambling and confusion."

"Now, children," said Mary, "I am going to make a speech, and you must all be still, and listen and hear my speech."

"What is the bottle for?" asked one of the children.

"There!" said Mary, "somebody has asked a question. Whoever interrupts me to ask a question when I am going to make a speech breaks the rules."

"I have given you all a picture with something in it for you to copy. I shall come round and show you all in turn what part it is that you are going to copy. You are not going to copy the whole of the picture, but only one thing in it."

Here the children all began to take up their pictures and examine them, and Dickey called out in a very loud voice that he was going to copy a cannon out of his picture.